

# Work Order ID 61889

September 9, 2010 10:06:15 AM



Page 1

Item ID: D3687-1

Accept



Setup Start



Revision ID:

Stop



Item Name: MOUNT

Start Date: 9/09/10

Start Qty: 5.00



Cust Item ID:

Required Date: 9/30/10

Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals: Process Plan: CY

Date: 10/9/9

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3687

Rev B C

100

0.00



Outsource1

Memo

0.00

Outsource process - Heat Treat

Send M174B3937X4750 For heat treating  
to CONDITION H-900(to become M174PHH900B3937X4750) ✓  
FTU IN EXCESS OF 190 KSI  
FTU IN EXCESS OF 170 KSI

CERTIFICATE IS REQUIRED

CY 10/9/9 (3)

105

0.00



Outsource5

Memo

0.00

Outsource process - Machining

Issue P/O: 12542  
Machine as per Dwg D3687  
Possible Supplier: Globus Precision  
Conformity sheet required

CY 10/9/9 (3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 61889**

September 9, 2010 10:06:15 AM



Page 2

Item ID: D3687-1

Accept



Setup Start



Revision ID:

Stop



Item Name: MOUNT

Start Date: 9/09/10

Start Qty: 5.00



Cust Item ID:

Required Date: 9/30/10

Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

110

Receive &amp; Inspect for Damage &amp; Mat'l Certs

0.00



Packaging

Memo

0.00

Packaging

Ensure certificate of conformity is attached

*C. J. / J. P. (5)*

Pb →

120

QC6- Inspect dimensions to drawing

0.00



QC

Memo

0.00

Quality Control

check all parts w/ .150" Precision An  
check all parts w/ D3688-1, D3688-2, D3688-5  
Stds and ABC 22 & Bells.

*Disinfect**8/10/12**X1 (X1) Pb next page.**(+4)*

124

0.00



Purchasing

Memo

0.00

Purchasing

Issue P/O FOR LIQUID PENETRATION  
P/O #: 12987

Certificate of conformity is required

*CZ 10/11/23 (5)*

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3873-1 PAR #: \_\_\_\_\_ Fault Category: Supplier NCR: Yes No DQA: 1 Date: 10/11/09  
Resolution: re work Disposition: rework QA: N/C Closed: 1 Date: 10/11/25

NCR: <u>61889</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/11/09	#110	Found at inspection that Qty x1 (all) parts have the .189" hole under size (checked with Precision Ground Pins). the .188" pin fits	<u>[Signature]</u> 10/11/09	→ Drill out .189" hole to correct size spec. → Deburr	<u>M-1</u> 10/11/09 <u>M-1</u> 10/11/09	<u>S</u> 10/11/09	<u>[Signature]</u> 10/11/09	<u>S</u> 10/11/09
		RL Drilled to small from Supplier & Ground Precision		→ Inform Globus of issue so it can be correct in the future.				<u>S</u> 10/11/09
		Qty x1 has the part more slightly in size with out compliance						

NOTE: Date & initial all entries

# Work Order ID 61889

September 9, 2010 10:06:15 AM



Page 3

Item ID: D3687-1

Accept



Setup Start



Revision ID:

Stop



Item Name: MOUNT

Start Date: 9/09/10

Start Qty: 5.00



Cust Item ID:

Required Date: 9/30/10

Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

125

Receive & Inspect for Damage & Mat'l Certs

0.00



Packaging

Memo

0.00

Packaging

ENSURE NDT RESULT IS ATTACH

→ ensure All Parts are thoroughly  
Solved - cleaned before next step.

126

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

127

QC6- Inspect dimensions to drawing

0.00



QC

Memo

0.00

Quality Control

See also →

110. Solved

Solved

ipsea P/O acuser  
attach copy of NDT result to W/O

P/O 12987

We'd ensure copy of NDT result  
is attached

C2101112335

10/4/23 (4)

Ar →

Pto →

10 11 23 (4)

44

# Dart Aerospace Ltd

W/O: 61889		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
10/11/05	#125.2	Perm. change ADD step to ensure Parts are thoroughly clean of any residue from NOT'ing	[Signature]	10.11.23	(4)		S 10/11/05	
			[Signature]	10.11.26				

Part No: D3687-1 PAR #: \_\_\_\_\_ Fault Category: Small Fabs NCR: Yes No DQA: [Signature] Date: 10/11/09  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: [Signature] Date: 10/11/25

NCR: 61889		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial: Chief Eng	Action Description Chief Eng	Sign & Date			
10/11/09	#110	Qty of Part had moved slightly in the vise and employee didn't notice it causing the one hole to be elongated. when opening up to .190".	<i>[Signature]</i> 11/11/09 QSI042	Scrap + Destroy no Replace	<i>[Signature]</i> 10/11/09	S 10/11/09	<i>[Signature]</i> 11/11/09 QSI042	S 10/11/09
		R.L. Process.						

NOTE: Date & initial all entries

# Work Order ID 61889

September 9, 2010 10:06:15 AM



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Item ID: D3687-1

Accept



Setup Start



Revision ID:

Stop



Item Name: MOUNT

Start Date: 9/09/10 Start Qty: 5.00



Cust Item ID:

Required Date: 9/30/10 Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

Identify as per dwg & Stock Location: 075

0.00



Packaging

Memo

0.00

Packaging

*10/14/10* *XX*

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

*10/11/25* *JD*

*mk*  
*10-11-24*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Page 1

September 9, 2010 10:06:14 AM

Work Order ID: 61889



Parent Item: D3687-1



Parent Item Name: MOUNT

Start Date: 9/09/10

Required Date: 9/30/10

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev:A New Issue 08-01-15 JLM Verified By:EC  
 IPP Rev:B Added Contion H-900 JLM Verified By:DD IPP REV  
 C: ADDED QC6 10.09.09 JLM VERIFIED BY DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M174PH- H900B3.937X4.750 		Purchased	No			100	f	22.8000	0.33333	1.66665			
17-4SS Bar H900-3.937x4.750													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT		22.8							
				110875		2							
				112374		20.8							
D3687-1P 		Purchased	No			105	Each	0.0000	1	5			
MOUNT													

1.66665 c2 10/9/9-  
 c2 10/10/26 x5

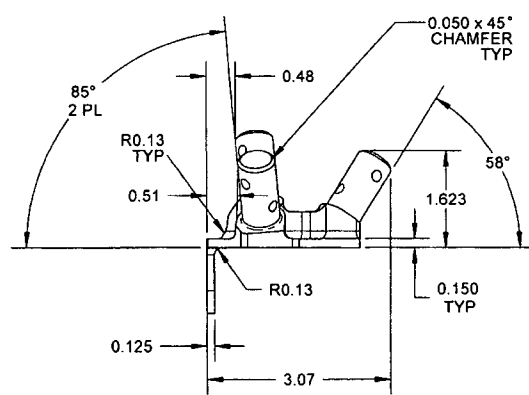
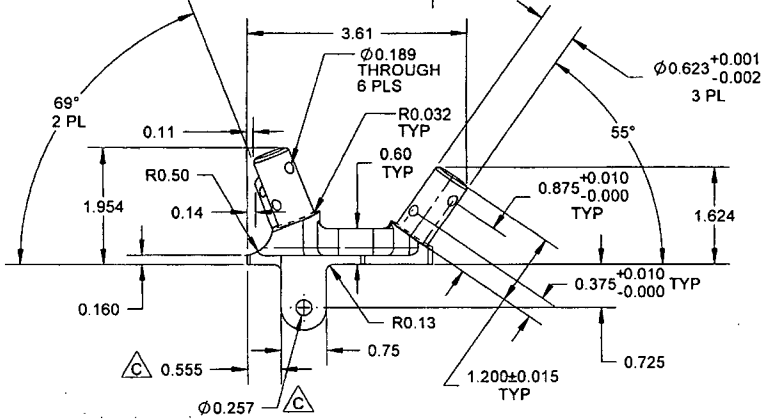
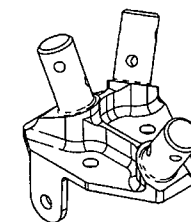
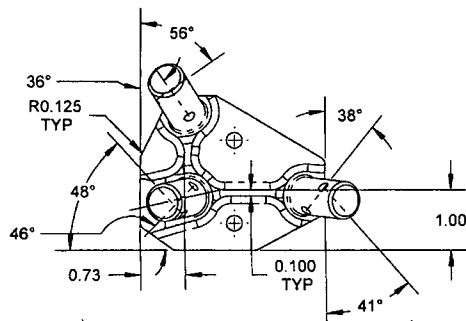
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

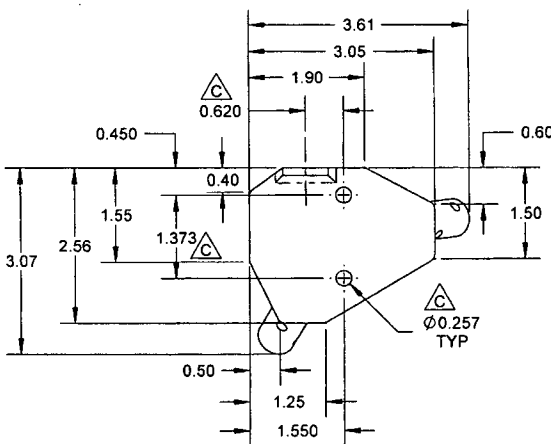
**NOTE:** Date & initial all entries



C210/919  
W10' 61889

**RELEASED**  
2009-09-22

**D3687-1 MOUNT**



- NOTES:  
 1) MATERIAL: 17-4PH SS BAR PER AMS 5643, H-900 CONDITION  
 2) FINISH: NONE  
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
 4) UNITS: INCHES UNLESS OTHERWISE NOTED  
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
 6) IDENTIFICATION: NONE  
 7) WEIGHT: 0.81 lb  
 8) LPI PER QSI 038 4.1.1 (ASTM E1417 LEVEL 2)

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	JP	DRAWING NO.	REV. C
MFG. APPR.	JP	D3687	SHEET 1 OF 2
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	MOUNT	NTS
DATE	09.08.26	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

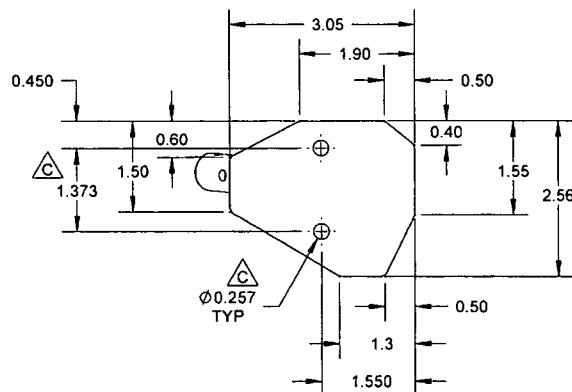
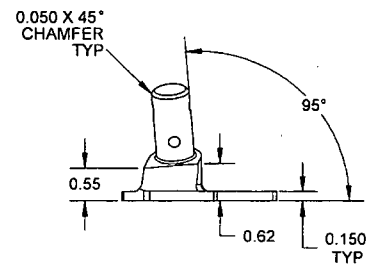
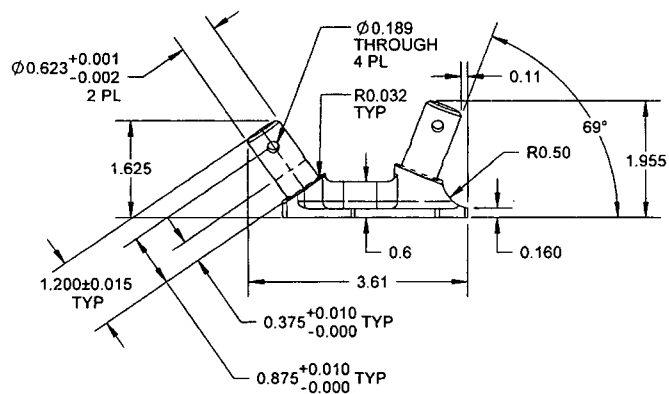
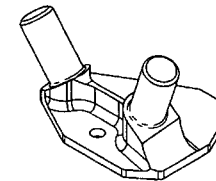
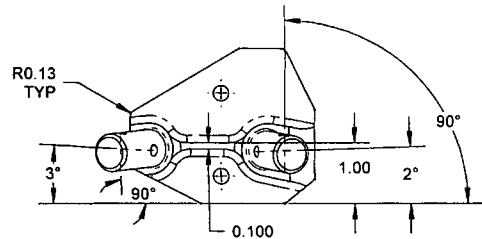
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

8 7 6 5 4 3 2 1



- NOTES:
- 1) MATERIAL: 17-4PH SS BAR PER AMS 5643, H-900 CONDITION
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.64 lb
  - 8) LPI PER QSI 038 4.1.1 (ASTM E1417 LEVEL 2)

**D3687-3 MOUNT**

**RELEASED**  
2009-09-22  
MP

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>GP</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>GP</i>	D3687	SHEET 2 OF 2
APPROVED	<i>GP</i>	TITLE	SCALE
DE APPR.	<i>H</i>	MOUNT	NTS
DATE	09.08.26	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

8 7 6 5 4 3 2 1

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

July 31, 2009 2:32:03 PM

Page 1

Work Order ID: 51097

Parent Item: D3687-1RevB

Parent Item Name: MOUNT

Comments:

Start Date: 8/03/09

Required Date: 8/11/09

Start Qty: 25.00

Required Qty: 25.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M174BH- H900B3.937X4.750		Purchased	No			100	f	3.0000	8.3333			

17-4SS Bar H900-3.937x4.750

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

110875

111100

m 11 2374

3

2.9

0.1

Purchased

No

105

Each

0.0000

25.0000

D3687-1P

MOUNT

mc 09-09-29 - 21

Pers/sr. (6)

REFERENCE ONLY

REFERENCE ONLY



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO12542

Purchase Order Date 9/09/10

PO Print Date 9/09/10

Page Number 1 of 1

Order From :

VC-GLO001

GLOBUS PRECISION INC.  
36 COLONNADE RD. N.  
NEPEAN, ON K2E 7J6  
CA

Contact Name

Vendor Phone 613 226 1579

Vendor Fax 613 226 1719

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

10127-2607

Tax Resale Nbr

Net 30

Terms

Currency

CAD

FOB

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**PAID**  
9/10/10

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D3687-1P	MOUNT	10/08/10 Yes	5.00 Each	Purolator ground	\$400.0000	\$2,000.00
		Special Inst:	MACHINE AS PER DWG D3687 REV. C B61889 MATERIAL: 174PH-H900 BAR 3.937 X 4.750 M112374 SUPPLIED BY DART				
2	D3687-3P	MOUNT	10/08/10 Yes	5.00 Each	Purolator ground	\$326.4200	\$1,632.10
		Special Inst:	MACHINE AS PER DWG D3687 REV. C B61890 MATERIAL AS ABOVE				
PO Total:							\$3,632.10

CERTIFICATE OF CONFORMITY  
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 9/09/10

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable





# Invoice

36 Colonnade Road N.  
Ottawa, Ontario K2E 7J6  
Tel: (613) 226-1579  
Fax: (613) 226-1719

DATE	INVOICE NO.
10/19/2010	18119

BILL TO			SHIP TO		
Dart Aerospace 1270 Aberdeen Street Hawksbury, Ontario K6A 1K7			Main Finished Goods Location Dart Aerospace 1270 Aberdeen Street Hawksbury, Ontario K6A 1K7		
P.O. NO.	TERMS	SHIP DATE	SHIPPED VIA	JOB NO.	FOB
12542	Net 30 Days	10/19/2010	FedEx	211	Globus
QTY	DESCRIPTION				
5	D-3687-1P Mount				
5	D-3687-3P Mount				
Business Number: 102122058 Total PST					
ALL COMPONENTS LISTED HAVE BEEN CHECKED FOR CONFORMANCE WITH DRAWINGS AND MATERIAL SPECIFICATIONS					

WHITE = Original  
BLUE = C of C  
YELLOW = Packing Slip

HST

TOTAL

\$0.00

## Receiving Report

Date: 09/08/06

Batch No: M112374

Supplier: Ymagene

Dart P/O: 10117

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☐

Release Note Attached: Yes ☐ No ☐ N/A ☐  
 Waybill Attached: Yes ☐ No ☐ N/A ☐  
 Shipment Complete: S Yes ☒ No ☐ N/A ☐  
 QC6 Inspection 09/08/21 N/A ☐  
 Work Order 09/08/21 N/A ☐

### Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12 CL

Production/Admin:

Date: 08/09/19  
 Received/Costing: RC 10117  
 Initial: CL

Location \_\_\_\_\_



**Magna Stainless**  
5775 Kieran St, Saint-Laurent QC H4S 0A3  
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105

# INVOICE

Pg 1 of 1 I014724

SOLD TO:

DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY , ON  
K6A 1K7

RECEIVED

JUL 31 2009

SHIP TO:

METCOR  
560 BOUL ARTHUR SAUVE  
SAINT-EUSTACHE, QC  
J7R 5A8

MTR:Y

INVOICE DATE:	07/27/09
ORDER DATE:	07/22/09
SHIP DATE:	07/27/09
ORDER NUMBER:	W016184
PURCHASE ORDER:	P010117

Currency		Sales Person		Ship Via		F.O.B.		Terms	
CANADIAN DOLLARS		ERYCK BLAIS		NIR:R-557065-1		PREPAID		NET 30 DAYS	
Ln.	Back Ordered	Ordered	Unit	Description		Shipped		Price Per	Value
		2	PC	STAINLESS - LB 17-4 PH 3.937 X 4.750 X 9' L029745 2 PC/1,201 LB PLEASE CUT BAR IN HALF		2 UN		4,310.00	8,620.00
		4	PC	STAINLESS ROUNDS SRB 17-4 ANN 1" x R/L L025718 12'7" 4 PC/134 LB PLEASE CUT ALL INTO 4' LG PIECES PLUS DROPS MUST BE SPEC AMS 5643		4 UN		135.00	540.00
		2	PC	SRB 17-4 ANN 1-3/8" x R/L L029746 12'5" 2 PC/124 LB PLEASE CUT ALL INTO 4' LG PIECES PLUS DROPS MUST BE SPEC AMS 5643		2 UN		280.00	560.00

07/28/09 13:22:01

Merchandise:	9,720.00
Surcharges:	
No Tax Costs:	
GST	486.00
PSTQ	765.45
Total Due:	10,971.45

Title to the goods sent out on this invoice remains with Magna Stainless Div of CSM ULC until such time as this invoice has been paid in full. Unless otherwise noted terms are 30 days. Interest accrues on all overdue accounts at the rate of 1.5% per month compounded monthly.

Q.S.T. # 1213236471  
G.S.T. # 881565899 RT0001

August 19, 2009 3:06:10 PM

Page 1 of 1

All amounts are calculated in domestic currency.

All Vendors PO ID PO10117 All Receipt Dates All Line Item Types  
All Item ID/GL/WOs All Rec. Employees All Currencies  
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name		VC-MAG002	Magna Stainless								
PO10117	1		M174PH-H900B3.937X4.750	f	7/27/09	8/19/09	19.0277	\$478.89	0.0000	0	\$9,112.18
CAD	No		17-4SS Bar H900-3.937x4.750 112374	f	18.0000	LAVO01		\$9,112.18	0.0000	0	
	2		M174PH-H900R1.000	f	7/22/09	8/19/09	44.0000	\$13.50	0.0000	0	\$594.00
	No		17-4SS H900 ROUND BAR 1.00 112374	f	40.0000	LAVO01		\$594.00	0.0000	0	
	3		M174PH-H900R1.375	f	7/22/09	8/19/09	24.0000	\$28.00	0.0000	0	\$672.00
	No		17-4 SS H900 ROUND BAR 1.375 112374	f	20.0000	LAVO01		\$672.00	0.0000	0	
									Total Received Quantity:		87.0277
									Total Qty to Inspect (PO U/M):		0.0000
									Total Reject Quantity:		0.0000
									Total Receipt Value:		\$10,378.18
									Total Balance Due Quantity:		0.0000

# MAGNA

## Magna Stainless

5775 Kerans St. S. Burnaby, BC V5A 0A3  
 Phone: (604) 339-1231 Fax: (604) 339-1105

## PACKING LIST

1014724

Page: 1 of 1

SHIP TO:  
 DART AEROSPACE LTD  
 12704 ABERDEEN STREET

SHIP TO:  
 METCOR  
 560 BOY ARTHUR SAUVE

HANKSBURY ON  
 K&A LTD  
 Contact: LINDA

SATNA CHASTACHE CO  
 113-840  
 Ship Terms: DREBAIL



SPECIAL INSTRUCTIONS

Currency		Sales Person	Customer Phone	Customer Fax	Customer PO
CANADIAN DOLLARS		BRVCK FLAHS	(513) 632-5200	(513) 632-1052	0010117
Sales Order	Terms	Ship Via	Date Ordered	Date Required	Date Shipped
W016184	NET 30 DAYS	NIR 3-857065-1	07/22/09	07/27/09	07/27/09

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
2		PC	STAINLESS - LB 1/4 PH 3/8 X 4 7/8 X 9	1, 201 LB / 2 PC	1029745	2
			PLEASE CUT BAR IN HALF			2
4		PC	STAINLESS ROUNDS 3/8" 1 1/2" DIA X 1/2" R/L	12 7/8 414 LB / 4 PC	1025418	4
			PLEASE CUT ALL INTO 4 PC PIECES PLUS DROPS			4
2		PC	MUST BE SPEC AND S&S 3/8" 1 1/2" DIA X 1/2" R/L	12 7/8 414 LB / 2 PC	1029746	2
			PLEASE CUT ALL INTO 4 PC PIECES PLUS DROPS			2
			MUST BE SPEC AND S&S			
Total Weight						1,459 LB

Received by:

Date:

Signature:

08/20/2009 THU 16:30 FAX 5143352202 Magna Stainless Admin

002/007



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

\*\*\*PO REPRINT\*\*\*

Purchase Order ID PO10117

Purchase Order Date 7/22/09

PO Print Date 7/22/09

Page Number 1 of 1

Order From :

VC-MAG002

MAGNA STAINLESS  
5775 RUE KIERAN  
ST LAURENT, QC H4S 0A3  
CA

Contact Name

Vendor Phone

800 363 6646

Vendor Fax

514 339 1105

Vendor Account Nbr

Buyer

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net-30

Currency

CAD

FOB

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req. Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M174PH-H900B3.937X4.750 C209108107	17-4SS Bar H900 3.937x4.750 3.9x4.810	7/27/09 Rec'd 19.3333 Yes	18.00 f	Epic collect	\$478.8900	\$8,620.02
2	M174PH-H900R1.000 rec'd 48 C209108107	17-4SS H900 ROUND BAR 1.00 44" total	7/22/09 Yes	40.00 f	Epic collect	\$13.5000	\$540.00
3	M174PH-H900R1.375 rec'd 24 C209108107	17-4 SS H900 ROUND BAR 1.375 24" total	7/22/09 Yes	20.00 f	Epic collect	\$28.0000	\$560.00

Special Inst: ALL ABOVE: 17-4PH cond. H900  
PER AMS 5643  
PLEASE SHIP ALL ABOVE TO  
METCOR INC  
560 BOUL. ARTHUR SAUVE  
SAINT-EUSTACHE, QC  
J7R 5A8 (450-491-5498)  
SHIP VIA EPIC EXPRESS OUR  
ACCT # 4300450343

POSITIVE RECALL

EFFECTIVE 7/22/09

RELEASED

AUTH [Signature]  
DATE 7/22/09

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY



PO Total:

\$9,720.02

Change Nbr: 2

Change Date: 7/22/09

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

**L Lacelle**

---

**From:** Eryck Blais [eblais@magnastainless.com]  
**Sent:** July 22, 2009 1:14 PM  
**To:** 'L Lacelle'  
**Subject:** RE: rfq

THANK YOU  
ERYCK

---

**From:** L Lacelle [mailto:llacelle@dartaero.com]  
**Sent:** Wednesday, July 22, 2009 1:09 PM  
**To:** Eryck Blais  
**Subject:** RE: rfq

Hi Eryck,

We will take the 2 x 9' (3.937 x 4.750) THAT IS O.K  
We also require 17-4PH H900 round bar 1.375, approx 20' 2 PCS 280.00 NOT H900  
Please advise asap...and could you ship this stuff to metcor tomorrow? I CAN SHIP TO METCOR ON MONDAY  
NEED ORDER TODAY BY 2:30 MAT'L IS IN ARE TOR BRANCH

Thx  
Linda

---

**From:** Eryck Blais [mailto:eblais@magnastainless.com]  
**Sent:** July 22, 2009 9:38 AM  
**To:** 'L Lacelle'  
**Subject:** RE: rfq

HI LINDA

NO IT DOES NOT MARK H900 YOU HAVE TO SEND IT TO METCOR  
ERYCK

---

**From:** L Lacelle [mailto:llacelle@dartaero.com]  
**Sent:** Wednesday, July 22, 2009 9:24 AM  
**To:** Eryck Blais  
**Subject:** RE: rfq

Does the bar read H900 on it? They did last time? Otherwise please ship to metcor  
Thx  
LL

---

**From:** Eryck Blais [mailto:eblais@magnastainless.com]  
**Sent:** July 22, 2009 9:18 AM  
**To:** 'L Lacelle'  
**Subject:** RE: rfq

7/22/09

YES IT WOULD BE FASTER WE WOULD SHIP IT FOR YOU AT METCOR  
ERYCK

---

**From:** L Lacelle [mailto:llacelle@dartaero.com]  
**Sent:** Wednesday, July 22, 2009 9:09 AM  
**To:** Eryck Blais  
**Subject:** RE: rfq

IF IT'S FAST YES.

*cut to 4'*

---

**From:** Eryck Blais [mailto:ebblais@magnastainless.com]  
**Sent:** July 22, 2009 9:03 AM  
**To:** 'L Lacelle'  
**Subject:** RE: rfq

GOOD MORNING LINDA

ON THE H900 CHANTAL WOULD TELL US TO SHIP AT METCOR AND YOU WOULD TAKE CARE OF THE  
HEATING PROCESS TO H900.  
THANK YOU ERYCK

---

**From:** L Lacelle [mailto:llacelle@dartaero.com]  
**Sent:** Tuesday, July 21, 2009 4:09 PM  
**To:** Eryck Blais  
**Subject:** rfq

Please advise price and delivery on:

40' x 17-4PH bar 3.937 x 4.750 OFFER 2 PCS 9' \$4310.00 EACH 1 PC 4' \$1915.00 EACH AND 2 PCS 12'  
LONG 5" SQ \$8095.00 EACH  
40' x 17-4PH round bar 1.000 4 PCS 135.00 EACH STK  
10' x 17-4PH bar .250 x 4.00 1 PC 225.00 EACH 5-7 DAYS  
10' x 17-4PH bar .375 x 1.00 1 PC 115.00 EACH 5-7 DAYS  
12' x 2024-T3 hex 1.375 1 PC \$385.00 EACH 7-10 Days  
12' x 2024-T3 round bar 1.750 1 PC 255.00 EACH 5-7 DAYS  
128sf x 2024-T3 sheet .080 3 PCS 345.00 EACH 5-7 DAYS  
128sf x 2024-T3 sheet .040 3 PCS 285.00 EACH 5-7 DAYS  
20' x 303 bar 1.500 x 3.000 2 PCS \$1165.00 EACH 5-7 DAYS  
40' x 303 round bar .500 4 PCS \$17.00 EACH STK  
40' x 304 bar .500 x 2.500 4 PCS 215.00 EACH TOR  
10' x 304 bar .625 x 3.00 1 PC 310.00 EACH TOR  
10' x 304 bar 1.750 x 1.750 \$685.00 EACH STK  
64sf x 304 sheet 12ga 2 PCS 260.00 EACH STK  
192sf x 304 sheet 16ga 6 PCS 158.00 EACH STK

Thank You,  
Linda Lacelle  
Production Manager  
Dart Aerospace Ltd



# Metcor Inc.

Metcor Inc.  
560, boul. Arthur-Sauvé  
St-Eustache (Québec) J7R 5A8  
Tél.: (450) 473-1884  
Fax Administration: (450) 491-5498  
Fax Production: (450) 491-6454

## Rapport d'inspection

Order	Load
149974	1

Customer: 215  
DART AEROSPACE  
1270 ABERDEEN  
HAWKESBURY

ON K8A 1K7

Shipped To:  
DART AEROSPACE  
1270 ABERDEEN  
HAWKESBURY

ON K8A 1K7

Customer PO / PO du Client	Customer Shipper No.	Material Type / Material	Mat'l Heat Code	Lot Number
10128		17-4PH		
<b>PROCESSING SPECIFICATIONS</b>				
AGE HARDEN CONDITION H900 SAE AMS 2759/3 REV E				
Requirement	Specified	Tests Performed	Test Results	
HARDNESS	40 - 47 HRC	28	43 - 45 HRC	
Quantity	Weight	Part Number / Part Description		
28	1447	BARRE RONDE 8 BARRES DE 7" + 18 BARRES DE 48" BAR 1" & 1.375" BARRE CARREE 4 BARRES DE 58" BAR 3.937 X 4.758 1 PALETTE		

### COMMENTS

INSPECTOR:

*[Signature]*



DATE: 2009-08-04

# FACSIMILE TRANSMITTAL

MAGNA  
INOXYDABLE INC.

TO/À: Chantal

FAX #: <sup>2</sup>  
(613) 632-1053

CO: Dart Aerospace

DATE: Aug. 20/09

RE: PO # 10117

PAGES: 6 + COVER  
+ COUVERTURE

FROM/DE: **BARRY MARTIN**

QUALITY MANAGER/GÉRANT À LA QUALITÉ

PHONE: (514) 339-1211

FAX: (514) 335-2202

E-MAIL: [bmartin@magnastainless.com](mailto:bmartin@magnastainless.com)

5775 Rue Kieran St-Laurent Quebec H4S 0A3 TEL: (514) 339-1211 1 (800) 363-6646

Javier Valle Echazuri

ACERATAVA  
ACERIA DE ALVA S.A.  
Director de Calidad y D

ACERATAVA  
ACERIA DE ALVA S.A.  
Director de Calidad y D



CD-119

DATE REGISTERED  
1/1/06  
SPECIFICATION CHECKED BY  
TONY HARRISON AND IS IN  
ACCORDANCE WITH OUR  
PURCHASE ORDER

ITEM	CLASS	STANDARD
1	304	ASTM A 304
2	304	ASTM A 304

TESTS PERFORMED ACCORDING TO

TO ISO 9001.  
THIS MATERIAL HAS BEEN TESTED ACCORDING TO OUR QUALITY SYSTEM APPROVED AND MAINTAINED

OTHER REQUIREMENTS

WELT TENSILE

ITEM 3 TENSILE STRENGTH GROUP

ITEM 3 TENSILE STRENGTH GROUP

ITEM	CLASS	STANDARD
1	304	ASTM A 304
2	304	ASTM A 304

MECHANICAL TESTING

ITEM	CLASS	STANDARD
1	304	ASTM A 304
2	304	ASTM A 304

CHEMICAL COMPOSITION (% BY WEIGHT OF ELEMENTS)

ITEM	CLASS	STANDARD
1	304	ASTM A 304
2	304	ASTM A 304

BASIC ELECTRICAL REQUIREMENTS + A.O.D. OUR REQUIREMENTS: 2219

MATERIAL SPECIFICATION: QND 40 REV.3

GRADE: 304

PURCHASE ORDER: AC0033

MILITARY CERTIFICATE OF QUALITY

MIL 50015 2.1.0

MIL 50015 2.1.0

DATE: 10.02.2006

SHEET: 1 / 1

NUMBER: 221901 MAY 0000

REVISION: 01.10.02.2006



5021287

# Acciaierie Valbruna S.p.A.

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4  
Cliente / Destinatario / Purchaser / Client  
VALBRUNA CANADA LTD  
8724 HOGGATE CRESCENT  
CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.P.A.  
Hersteller / Producer



CERTIFICATO DI COLLAUDO  
ABNAHMEPRUEFZEUGNIS  
INSPECTION CERTIFICATE  
CERTIFICAT DE RECEPTION  
EN 10204 (2005), 3.1

Avviso di Spedizione: D-VI09000237  
Lieferanten-Prüfungsurteil

Certificato nr: MEST706471/2009/  
Prüfung/Inspektion

Conferma ordine nr: E108009960  
Werk Auftragsbestätigung

Marchio di Fabbrica:  
Zeichen des Werkschmelzwerkes  
Trade mark  
Signe de l'usine / production

Punzone del Collaudatore:  
Stempel des Werkschmelzwerkes  
Inspector's stamp/Prüfung des Testzeugens



Oggetto Provo: Polished Annealed Peeled  
Prüfungsbefund/Inspektionsergebnis

Tipo di Elaborazione: E+AOD  
Erzeugnisbezeichnung/Herstellungsprozess/Mode of elaboration

Specifiche:  
Anforderungen / Requirements / Exigences  
VAL CANADA 2 630 A  
ASTM A564 2004 S17400  
(D) SEC.II PTA 2007 EDITION

AMS 5643 R S17400

ASME SA564 2007 S17400 (D)

Qualità: T-630  
Werkstoff/Grade of material

Marca: V174

Markenbezeichnung/Brand Name

Punzonatura: T-630

Markenbezeichnung/Brand Name

Pos. nr. Pos. nr. No. du poste	Oggetto Description Description du produit	Dimensioni - In Abmessungen Dimensions	Tolleranza Tolerance Tolérance	Lunghezza - Ft Länge Longueur	Colata Schmelze Hütte Casting	Pezzi Stückzahl Pièces	Peso - LB Gewicht Poids	Lotto nr. Losn. Lot nr.
0070	Round	1,0000	484-06B	10 / 12	247478		5.739	630403280

Sono state soddisfatte tutte le condizioni richieste  
Die gestellten Anforderungen sind in der Anlage erfüllt  
The material has been furnished in accordance with the requirements  
Le matériel a été livré conforme aux exigences

Controllo antimescolanza: OK  
Vermeidungsmischung: speziell/Abwehr der Vermischung  
Austeilung: Vermeidungsmischung OK  
Controllo antimescolanza: OK

Controllo visivo e dimensionale: soddisfa le esigenze  
Sichtprüfung und Ausmessung: ohne Beanstandung  
Visual inspection and dimensional check: satisfactory  
Contrôle visuel et dimensionnel: satisfaisant

TEST	Prova/Prüfung Test/Prüfung Essai/Prüfung	°F	Posti Stücke Platz	Snervamento Zugversuch Zugversuch	Snervamento Zugversuch Zugversuch	Resistenza Zugversuch Zugversuch	Allungamento Zugversuch Zugversuch	Strizione Zugversuch Zugversuch	Resistenza Zugversuch Zugversuch	Durezza Härte Härte
Valori richiesti 1 Anforderungen/Bedingungen Anforderungen/Bedingungen	min max									HB
A										363

Sample cond. H900

Sample cond. H900														
Tipo Trattamento Werkstoffbehandlung Werkstoffbehandlung		Temperatura Temperatur Temperatur	Raffreddamento Abkühlung Cooling	Permanenza Haltezeit Retention	Tipo Trattamento Werkstoffbehandlung Werkstoffbehandlung		Temperatura Temperatur Temperatur	Raffreddamento Abkühlung Cooling	Permanenza Haltezeit Retention	Tipo Trattamento Werkstoffbehandlung Werkstoffbehandlung		Temperatura Temperatur Temperatur	Raffreddamento Abkühlung Cooling	Permanenza Haltezeit Retention
Aging		900 °F	AIR	60										
TEST	Prova/Prüfung Test/Prüfung Essai/Prüfung	°F	Posti Stücke Platz	Snervamento Zugversuch Tensile strength	Snervamento Zugversuch Tensile strength	Resistenza Zugversuch Tensile strength	Allungamento Zugversuch Elongation	Strizione Zugversuch Reduction of area		Resistenza Zugversuch Tensile strength		Durezza Härte Hardness		
	Valori richiesti 1 Anforderungen/Bedingungen Values required	min max		Rp 0,2% k.s.i.	-	Rm k.s.i.	E 4d %	RA %		-	-	HB		
B	12,5	68	L	183	-	190	10	40		-	-	388		
						201	16	58				444		
FERRITE DELTA %												431		

FERRITE DELTA % : 1,0

1/1 - lunghezza del pezzo, 1/2 - spessore del pezzo, 1/3 - spessore del pezzo

## Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Werkstoffanalyse

Colata / Hütte Schmelze / Guss	min - max min - max	1,00	1,00	15,00 17,50	0,50	3,00 5,00	3,00 5,00	0,15 0,45	0,040	0,030	5°C 0,45	-	-	-	-
247478	C %	0,037	0,35	0,48	15,13	0,23	3,24	4,56	0,21	0,027	0,001	0,21	0,001		
	Si %														
	Mn %														
	Cr %														
	Mo %														
	Cu %														
	Ni %														
	Nb+Ta														
	P %														
	S %														
	Cb-Nb														
	Ta %														

Annealing temperature 1922 deg. F for 1 H / air.

Macro etch test: satisfactory.

Produced without class I-II Ozone depleting substances.

Material is DFARS Compliant

Vicenza, 09/01/09 VCC012 (FACC. ACCERT)	Il collaudatore di stabilimento / der Werkschmelzverständiger / Works inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 2
---	--	-----------------

# Acciaierie Valbruna S.p.A.



36100 VICENZA (Italia) - Viale della scienza, 25 z.l.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4  
Clienti / Destinatari/Prodotto/Clienti  
VALBRUNA CANADA LTD  
8724 HOLGATE CRESCENT  
CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.P.A.  
Hersteller/Hersteller/Hersteller

Oggetto Prove: Polished Annealed Peeled  
Prüfgegenstand/Prüfgegenstand/Prüfgegenstand

Avviso di Spedizione: D-VI09000237  
Lieferungsfach/Lieferungsfach/Lieferungsfach

Ordine nr: 808001998 STOCK  
Bestell-Nr./Bestell-Nr./Bestell-Nr.

Tipo di Elaborazione: E+AOD  
Erstellungsmethode/Erstellungsmethode/Erstellungsmethode

## CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005) , 3.1

Certificato nr: MEST706471/2009/  
Prüfungsfach/Prüfungsfach

Conforma ordine nr: EI08009960  
Werk-/Auftrag-/Werk-/Auftrag

Marchio di Fabbrica:  
Zeichen des Lieferanten  
Trade mark:  
Signe de l'usine: production



Funzione del Collaudatore:  
Stempel des Werkssachverständigen  
Inspector : a stamp/Inspector de l'Attestation



Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination  
The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1.5, A.3 by TÜV and LLOYD'S

Vicenza, 09/01/09 VCO012 (Mod. MCE/7)	Il collaudatore di stabilimento / der Werkssachverständige / Works Inspector / L'agent d'usine M. Rizzotto	Pagina - 2 di 2
---	---	-----------------

CERTIFICATE OF TESTS  
CERT SERIAL# 000681003



**TALLEY METALS**  
A Carpenter Company

Talley Metals Technology, Inc.  
205 Talley Metals Lane  
McBee, SC. 29101

Tel: (610) 208-2000 (800) 338-4592

01/30/09

CUSTOMER/RESELLER/CLIENT

ASA ALLOYS DIV./ CSM INC.  
4311-92ND AVE.  
EDMONTON, ALBERTA  
T6B 3M7, CANADA

ABNAHMEPRUEFZEUGNIS

CERTIFICAT DE CONTROLE

- THE RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FEDERAL STATUTES INCLUDING FEDERAL LAW, TITLE 18, CHAPTER 47.
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- MATERIAL IS MANUFACTURED FREE FROM MERCURY, RADIUM, ALPHA AND GAMMA SOURCE CONTAMINATION.
- THIS DOCUMENT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF CARPENTER TECHNOLOGY CORPORATION.

6987 285  
SELLER/VERKÄUFER/VEUNDEUR PAGE 1 OF 2

TALLEY METALS TECH, INC.

ACCOUNTS PAYABLE  
P. O. BOX 2498  
HARTSVILLE, SC 29551

CUSTOMER ORDER NO./BESTELL-NR./N° DE COMMANDE	CARPENTER NO./WERKS-NR./N° DE REFERENCE INTERNE	DATE/DATE/DATE	WEIGHT/GEWICHT/POIDS
077548-AG	TLY952201 L14967	01/30/09	992.000

HEAT NUMBER / SCHMELZE-NR. / N° DE COULEE: G15282

PRODUCT DESCRIPTION: TYPE 17-4 SOLUTION ANNEALED COLD FINISH

SPECIFICATION: TALLEY 17-4T3A CAP OF H900  
AMS 2303 REV E (10/ /01)  
AMS 2315 REV F (01/ /08)  
AMS 5643 REV R (02/ /08) (EXCEPT CD ROUND CHEM & MECH PROPS ONLY)  
ASTM-A484-06B  
ASTM-A564-04  
ASME-SA564 2007 EDITION

SIZE 1.375000 IN. ( 34.93 MM) RD BAR

PRIMARY HEAT CHEMISTRY(WT%): (TEST METHOD IS SHOWN IN PARENTHESIS)

C (COM) 0.029 MN(XRF) 0.86 SI(XRF) 0.40 P (XRF) 0.019 S (COM) 15.36 CR(XRF)  
NI(XRF) 4.30 MO(XRF) 0.24 CU(XRF) 3.76 N (FUS) 0.028 CB(XRF) 0.24 TA(XRF) LT .01  
CB+TA 0.25

THIS HEAT MELTED BY THE ARC/AOD PROCESSES  
THIS MATERIAL WAS MANUFACTURED IN ACCORDANCE WITH CARPENTER SPECIALTY ALLOYS  
OPERATIONS QUALITY PROGRAM MANUAL REVISION 27, DATED 1/08.  
MILL HEAT TREATMENT:

TYPE SOL ANL  
TEMP 1900F ( 1037C)  
TIME (CONT FCE) 1.46 HOURS  
QUENCH AIR

DISCS MACROETCHED AND APPROVED

HARDNESS AS SHIPPED, HBW - 341 (MIDRADIUS)

MICROSTRUCTURE - FERRITE - NONE  
MAGNETIC PARTICLE: FREQUENCY = 0 / SEVERITY = 0

CONTINUED ON NEXT PAGE

This certification is made to the customer printed on this form. Carpenter neither makes, nor assumes responsibility for, any representation or certification to other parties.  
Die vorliegende Zertifizierung ist nur für den in diesem Formular genannten Kunden gültig. Carpenter übernimmt gegenüber Dritten keine Haftung für die angegebenen Daten oder Zertifizierungen.  
Ce certificat est uniquement valable pour le client dont le nom est imprimé sur ce formulaire. Carpenter n'assume pas de responsabilité pour une certification vis-à-vis d'une tierce personne.

CERTIFICATE OF TESTS  
CERT SERIAL# 000681003

ABNAHMEPRUEFZEUGNIS

CERTIFICAT DE CONTROLE



**TALLEY METALS**  
A Carpenter Company

Talley Metals Technology, Inc.  
205 Talley Metals Lane  
McBee, SC. 29101 Tel: (610) 268-2000 (800) 338-4592

♦ THE RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FEDERAL STATUTES INCLUDING FEDERAL LAW, TITLE 18, CHAPTER 47.  
♦ THE VALUES AND OTHER TECHNICAL DATA REPRESENT THE RESULTS OF ANALYSES AND TESTS MADE ON SAMPLES COLLECTED FROM THE TOTAL LOT. ORIGINAL DATA RECORDS CAN BE TRACED BY REFERENCE TO THE CARPENTER ORDER NUMBER.  
♦ MATERIAL IS MANUFACTURED FREE FROM MERCURY, RADON, ALPHA AND GAMMA SOURCE CONTAMINATION.  
♦ THIS DOCUMENT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF CARPENTER TECHNOLOGY CORPORATION.

01/30/09

CUSTOMER/BESTELLER/CLIENT

SELLER/VERKÄUFER/VENDEUR PAGE 2 OF 2

ASA ALLOYS DIV./ CSM INC.  
4311-92ND AVE.  
EDMONTON, ALBERTA  
T6B 3M7 , CANADA

TALLEY METALS TECH, INC.

ACCOUNTS PAYABLE  
P. O. BOX 2498  
HARTSVILLE , SC 29551

CUSTOMER ORDER NO./BESTELL.-NR./N° DE COMMANDE	CARPENTER NO./WERKS-NR./N° DE REFERENCE INTERNE	DATE/DATUM/DATE	WEIGHT/GEWICHT/POIDS
077548-AG	TLY952201 L14967	01/30/09	992.000

HEAT NUMBER / SCHMELZE-NR. / N° DE COULEE:

G15282

CAPABILITY

900 F( 482 C), 01 HR

AIR COOL

YIELD STRENGTH, (0.20 %) KSI(MPA)	186.0( 1282)
TENSILE STRENGTH, KSI(MPA)	207.0( 1427)
ELONGATION IN 2.00", %	13.0
REDUCTION OF AREA, %	46.0
HARDNESS , HBW	409.0

(CONVERTED FROM TENSILE STRENGTH)

NO WELD REPAIR PERFORMED  
MATERIAL PRODUCED ON THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A.  
MATERIAL HAS BEEN MELTED IN USA OR QUALIFYING COUNTRY TO DFARS REQUIRE-  
MENTS 252.225-7014 WITH ALTERNATE 1 FOR QUALIFYING COUNTRY 225.872.1.  
WE HEREBY CERTIFY THAT THE ABOVE TEST DATA ARE IN ACCORDANCE WITH THE  
PURCHASE ORDER AND SPECIFICATION REQUIREMENTS. CERTIFICATE OF TEST IS  
PREPARED IN ACCORDANCE WITH PARAGRAPH 3.1B OF EN 10204(DIN50049)

STEPHANIE E. MCCULLUM  
QUALITY ASSURANCE ENGINEER  
CARPENTER TECHNOLOGY CORPORATION

*Stephanie E. McCullum*

This certification is made to the customer printed on this form. Carpenter neither makes, nor assumes responsibility for, any representation or certification to other parties.  
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## LIQUID PENETRANT TEST REPORT

P- 05491

PAGE 1 of 1

DATE NOV-23-2010 TIME AM ☒ PM ☐CLIENT DART AEROSPACE  
ATTENTION LINDA WACELLE/CHANTAL/IAN  
ADDRESS 1270, ABERDEEN ST.  
HAWKESBURY, ONACUREN JOB NO. 138-10-0871  
PO/NO. V29871  
WORK LOCATION AS ADDRESS

ACCEPTANCE STD. REV./DATE

PROJECT WET FLUO. PENETRANT TESTING ON "CROSSTUBES" &amp; "MOUNT"

ITEM(S) EXAMINED SEE W.O.# BELOW IN RESULTS

JOB DESCRIPTION PROCEDURE No. LT-002 REV./DATE 2008 TECHNIQUE No. LT-002 REV./DATE 2008

PART No. MATERIAL THICKNESS N/A

SCOPE PERFORMED A WET FLUORESCENT INSPECTION BY LIQUID PENETRANT ON 100% OF THE EXTERNAL SURFACE

## TEST DETAILS

METHOD	<input checked="" type="checkbox"/> FLUORESCENT	<input type="checkbox"/> VISIBLE	<input checked="" type="checkbox"/> WATER WASH	<input type="checkbox"/> SOLVENT REMOVABLE	<input type="checkbox"/> POST EMULSIFIED
FAMILY BRAND	MAGNAFLUX		BLACK LIGHT S/N	13790	
ENETRANT	2L-67	MINIMUM DWELL TIME	10	MIN.	OUTPUT > 1000 $\mu$ W/cm <sup>2</sup>
ENETRANT REMOVER	H <sub>2</sub> O	MINIMUM DRY TIME	>10	MIN.	OUTPUT > 100 fc @ SURFACE
DEVELOPER	SKD-50	MINIMUM DWELL TIME	10	MIN.	OTHER
DEVELOPER TYPE	<input checked="" type="checkbox"/> NON AQUEOUS	<input type="checkbox"/> AQUEOUS	<input type="checkbox"/> DRY	LIGHT METER S/N	CAL DUE DATE FEB-05-2011

## TEST SURFACE

SURFACE CONDITION	<input type="checkbox"/> AS GROUND	<input type="checkbox"/> AS WELDED	<input type="checkbox"/> MACHINED	<input type="checkbox"/> SHOT BLASTED	<input checked="" type="checkbox"/> CLEAN BARE METAL
SURFACE TEMPERATURE	<input type="checkbox"/> < -4°C/ 20°F	<input type="checkbox"/> -4°C/ 20°F TO 10°C/50°F	<input checked="" type="checkbox"/> 10°C/50°F TO 52°C/125°F	<input type="checkbox"/> > 52°C/125°F	

RESULTS- (☐ METRIC ☒ IMPERIAL)

ITEM	COMMENTS	ACCEPT/REJECT
1	CROSSTUBE - W.O. ID 63527	✓
2	CROSSTUBE - W.O. ID 63528	✓
3	CROSSTUBE - W.O. ID 63533	✓
4	CROSSTUBE - W.O. ID 63539	✓
5	CROSSTUBE - W.O. ID 63744	✓
6	CROSSTUBE - W.O. ID 63745	✓
7	4X MOUNT(S) - W.O. ID 61889	✓

ITEM ID: D206-667-203 (ITEMS #1, 2)  
ITEM ID: D210-664-201 (ITEMS #3, 4)  
ITEM ID: D210-664-101 (ITEMS #5, 6)  
CROSSTUBE FWD  
MOUNT  
ITEM ID: D3687-1 (ITEM #7)

## Scope of Services

The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the information or information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

## Standard of Care

When performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

## SIGNATURES

CLIENT REPRESENTATIVE

MATT MURDOCH

MATT MURDOCH

DTR # E63039

TECHNICIAN (SIGNATURE):

GIVES DESROSIERS

SIGNATURE

REPORT

REVIEWED BY:

NAME

INITIALS

NAME (PRINT):

1<sup>ST</sup> TECHNICIAN2<sup>ND</sup> TECHNICIAN

CGSB LEVEL 2 SNT LEVEL 2

CGSB LEVEL SNT LEVEL

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